

TWO NEW SPECIES OF *TENTHREDO* (HYMENOPTERA, TENTHREDINIDAE) FROM CHINA

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Abstract *Tenthredo trixanthomacula* Wei et Yan, sp. nov. and *Tenthredo rubitarsalitia* Wei et Xu, sp. nov. from China are described and figured. The former belongs to *Tenthredo formosana* group; the latter belongs to *Tenthredo potanini* group. The type specimens of the new species are kept in the Insect Collection of Central South University of Forestry and Technology, Changsha, Hunan Province, China (CSCS).

***Tenthredo trixanthomacula* Wei et Yan, sp. nov.**
(Figs 1–12)

Body length 15 mm in female. The new species is similar to *Tenthredo longiserrula* Wei, 2002 in body colour and punctures, but can be separated from the latter by the serrulae strongly and roundly protruding, each serrula with 1 inner subbasal teeth and without outer subbasal teeth, the outer side of serrula not incised (*T. longiserrula* has very long and flat serrulae, middle serrulae each with about 25–26 minute distal teeth and without proximal tooth, and outer side of each serrula distinctly incised).

Holotype ♀, Fangxiang, Mt. Leigong, alt. 1 000 m, Guizhou Province, 2 June 2005, LIANG Ming-Wen leg. Paratypes: 1 ♀, Jinzhai, Tiantangzhai (31°09'N, 115°45'E; alt. 596 m), Anhui Province, 6 May 2006, ZHU Xiao-Ni leg.; 1 ♂, Mt. Zhongnan (33°59'N, 108°58'E; alt. 1 555 m), Shaanxi Province, 27 May 2006, YANG Qing leg.; 1 ♀, Jinzhai, Tiantangzhai (31°08'N, 115°47'E; alt. 1 000 m), Anhui Province, 2 June 2006, ZHOU Hu leg.; 1 ♀, Jinzhai, Tiantangzhai (31°08'N, 115°47'E; alt. 1 220 m), Anhui Province, 2 June 2006, NIU Geng-Yun leg.; 1 ♀, Bifengxia, Ya'an, alt. 1 000–1 100 m, Sichuan Province, 9 July 2003, LIU Wei-Xing leg.; 1 ♀, Feiquangou, Mt. Hou, Qingcheng (30°55'N, 103°29'E; alt. 900 m), Sichuan Province, 28 June 2006, ZHONG Yi-Hai leg.; 2 ♀♀, Baiyun Temple, Mt. Hou, Qingcheng (30°56'N, 103°28'E; alt. 1 600 m), Sichuan Province, 29 June 2006,

ZHONG Yi-Hai, ZHOU Hu leg.; 1 ♀, Mt. Yun, Wugang, alt. 1 100 m, Hunan Province, 4 June 2003, HE Ying-Ke leg.; 1 ♀, Mt. Long, Lianyuan, Hunan Province, 9 May 1999, ZHANG Kai-Jian leg.; 1 ♀, Mt. Wanlong, Pingxiang, alt. 1 000–1 200 m, Jiangxi Province, 2 May 2006, WEI Mei-Cai leg.; 1 ♀, Honghuapu Town, Feng County (33°44'N, 107°10'E; alt. 1 080 m), Shaanxi Province, 25 May 2007, ZHU Xun leg.; 1 ♀, Hunan Forestry Academy of Sciences; 1 ♀, Tongyu Town, Tongguan (34°27'N, 116°21'E; alt. 1 052 m), Shaanxi Province, 20 May 2006, ZHU Xun leg.; 1 ♀, Shangouli, Mt. Mufu (28°57'N, 113°49'E; alt. 860 m), Hunan Province, LIU Fei leg.; 2 ♀♀, Mt. Taiyang, Gansu Province, 13 June 2008, WU Xing-Yu and DU Wei-Ming leg.; 1 ♀, Mayan Forestry Centre, Huixian, Gansu Province, 5 June 2007, WU Xing-Yu leg.; 1 ♀, Dongcha Forestry Centre, Maiji, Gansu Province, 3 June 2007, WU Xing-Yu leg.; 1 ♀, Mt. Taiyang, Zaojiao, Qin Zhou, Gansu Province, 15 June 2006, LI Feng-Chun leg.; 1 ♀, Mt. Taiyang, Zaojiao, Qin Zhou, Gansu Province, 6 June 2007, LI Feng-Chun leg.; 2 ♀♀, Taohuagou, Mt. Xiaolong, Dongcha Forestry Centre, (34°18'N, 106°34'E; alt. 1 180 m), Gansu Province, 11 June 2009, WU Xing-Yu and XIN Heng leg.; 1 ♀, 1 ♂, Shiyan Forestry Centre, Ganxu Forestry Institute (34°20'N, 106°E; alt. 1 590 m), Gansu Province, 9 July 2009, FAN Hui and YANG Ya-Li leg.; 1 ♀, Mt. Xiaolong, Maiji Forestry Centre, Mt. Taiyang (31°25'N, 105°46'E; alt. 1 620 m), Gansu Province, 28 July 2009, DU Wei-Ming leg.; 1 ♀, Shiyan Forestry Centre, Gansu Forestry Institute (34°20'N, 106°E; alt. 1 590 m), Gansu Province, 27 July 2009, WU Xing-Yu leg.; 1 ♀, Xuanjiagou, Maiji Jiezi Forestry Centre, Tianshui (34°27'N, 106°04'E; alt. 1 370 m), Gansu Province, 16 June 2009, ZHANG Xiu-Ling leg.; 1 ♀, Xiaozhai, Shennongjia (31°34'N, 110°08'E; alt. 905 m), Hubei Province, 24 May

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2008, ZHAO Fu leg.; 1 ♀, Mt. Laojun, Shennongjia (31°25'N, 110°32'E; alt. 841 m), Hubei Province, 16 May 2008, ZHAO Fu leg.; 1 ♀, Qianjiaping, Shennongjia (31°24'N, 110°24'E; alt. 1 789 m), Hubei Province, 3 July 2009, ZHAO Fu leg.; 1 ♀, Qianjiaping, Shennongjia (31°24'N, 110°24'E; alt. 1 789 m), Hubei Province, 4 July 2009, JIAO Zhao leg.; 2 ♀ ♀, Zhangbaohe, Shennongjia (31°24'N, 110°24'E; alt. 1 156 m), Hubei Province, 12 – 13 June 2009, ZHAO Fu leg.; 1 ♂, Xiaozhai, Shennongjia (31°34'N, 110°08'E; alt. 905 m), Hubei Province, 24 May 2008, JIAO Zhao leg.; 10 ♀ ♀, 2 ♂ ♂, Wulingguan, Wulaofeng (34°48'N, 110°35'E; alt. 1 300 m), Shaanxi Province, 6 July 2008, FEI Han-Lan and WANG Xiao-Hua leg.; 2 ♀ ♀, Hongshayu, Wulaofeng (34°48'N, 110°35'E; alt. 1 300 m), Shaanxi Province, 4 July 2008, FEI Han-Lan and WANG Xiao-Hua leg.; 12 ♀ ♀, 6 ♂ ♂, Qishutai, Wulaofeng (34°48'N, 110°35'E; alt. 1 200 m), Shaanxi Province, 5 July 2008, FEI Han-Lan and WANG Xiao-Hua leg.; 2 ♀ ♀, 2 ♂ ♂, Jinxiugu, Wulaofeng (34°48'N, 110°34'E; alt. 1 077 m), Shaanxi Province, 5 July 2008, FEI Han-Lan and WANG Xiao-Hua leg.; 1 ♀, Jinxiugu, Wulaofeng, (34°48'N, 110°34'E; alt. 1 029 m), Shaanxi Province, 8 June 2009, WANG Xiao-Hua leg.; 1 ♀, Mingyandong, Wulaofeng (34°48'N, 110°35'E; alt. 1 603 m), Shaanxi Province, 3 July 2008, FEI Han-Lan leg.; 1 ♂, Yuepingliang, Wulaofeng (34°47'N, 110°35'E; alt. 1 739 m), Shaanxi Province, 3 July 2008, FEI Han-Lan leg.; 1 ♀, Shuitaogou, Mt. Mian (36°51'N, 112°E; alt. 1 439 m), Shaanxi Province, 30 June 2008, FEI Han-Lan leg.; 1 ♀, Shiyan Forestry Centre, Gansu Forestry Institute (34°20'N, 106°E; alt. 1 600 m), Gansu Province, 9 July 2009, ZHU Xun leg.

Etymology. The specific epithet of the new species refers to each of the 6th – 8th abdominal tergites with three yellow maculae.

***Tenthredo rubitarsalitia* Wei et Xu, sp. nov.** (Figs 13 – 24)

Body length 11 – 12 mm in female. This new species is similar to *Tenthredo sanhuangica* Nie et Wei, 2002 but differs from it in postocellar area 2 times as broad as long; scape and pedicel yellow brown, flagellum clavate with subapical antennomeres distinctly enlarged; tegula yellow brown; mesoscutellum black

with longitudinal carina; ventral side of mesepisternum without thorn; the posterior margins of tergites 6 – 7 and posterior margins of all sternites yellow brown; middle serrulae more protruding (In *T. sanhuangica*, postocellar area 1.8 times as broad as long; scape and pedicel black, flagellum filiform with subapical antennomeres not enlarged; tegula black; mesoscutellum yellow, without longitudinal carina; ventral side of mesepisternum with a distinct thorn; the tergites 6 – 7 and sternites 2, 4 – 6 black without pale marking; middle serrulae weakly protruding).

Holotype ♀, Jinzhai, Tiantangzhai (31°09'N, 115°45'E; alt. 596 m), Anhui Province, 6 May 2006, ZHU Xiao-Ni leg. **Paratypes:** 1 ♀, Mt. Mufu, alt. 1 200 m, Pingjiang County, Hunan Province, 7 May 2001, WEI Mei-Cai leg.; 1 ♀, Mt. Mufu, alt. 1 400 m, Pingjiang County, Hunan Province, 8 May 2001, ZHONG Yi-Hai leg.; 1 ♀, Mt. Zhongnan (33°54'N, 108°58'E; alt. 1 292 m), Shaanxi Province, YANG Qing leg.; 1 ♀, Yaoluoping (31°2'N, 116°5'E; alt. 900 m), Yuexi County, Anhui Province, 27 Apr. 2006, NIE Mei leg.; 1 ♀, Dabagou (33°40'N, 106°49'E; alt. 1 320 m), Liuba County, Shaanxi Province, 20 May 2007, ZHU Xun leg.; 2 ♀ ♀, Tianmen Temple, Mt. Mufu (28°58'N, 113°49'E; alt. 1 350 m), Hunan Province, 25 Apr. 2008, ZHANG Yuan leg.; 2 ♀ ♀, Yuntengshanzhuang, Mt. Mufu (28°58'N, 113°49'E; alt. 1 100 m), Hunan Province, 25 Apr. 2008, ZHANG Yuan and LI Ze-Jian leg.; 1 ♀, Gouli, Mt. Mufu (28°57'N, 113°49'E; alt. 860 m), Hunan Province, 24 Apr. 2008, LI Ze-Jian leg.; 1 ♀, Laopenggou, Mt. Mufu (28°58'N, 113°49'E; alt. 1 220 m), Hunan Province, 25 Apr. 2008, LI Ze-Jian leg.; 2 ♀ ♀, Xiaolongshan, Maoyan Forestry Centre (34°03'N, 105°45'E; alt. 1 420 m), Gansu Province, 25 Apr. 2008, WU Xing-Yu and XIN Heng leg.; 1 ♀, Chunqiu'ao, Mt. Dawei (28°25'N, 114°06'E; alt. 1 300 m), Hunan Province, 3 Apr. 2010, ZHU Chao-Yang leg.; other specimens: 1 ♀, Xianrending, Mt. Xitianmu, 2 – 4 June 1990, WANG Xin-Geng leg. (Specimen is kept in the Insect Collection of the Zhejiang University); 1 ♀, Mt. Xitianmu, 17 May 1988, LOU Xiao-Yun leg. (Specimen is kept in the Insect Collection of the Zhejiang University).

Etymology. The new species is named after the orange brown tarsus.

Key words Hymenoptera, Tenthredinidae, *Tenthredo*, new species, China.

中国叶蜂属两新种 (膜翅目, 叶蜂科)

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摘 要 记述中国叶蜂科 Tenthredinidae 叶蜂属 *Tenthredo* 2 新种, 三斑槌腹叶蜂 *Tenthredo trixanthomacula* Wei *et* Yan, sp. nov. 和褐跗短角叶蜂 *Tenthredo rubitarsalitia* Wei *et* Xu, sp. nov.。前者隶属于槌腹种团 *T. formosana* group, 后者隶属于短角种团 *T. potanini* group。新种模式标本保存于中南林业科技大学昆虫系统与进化生物学实验室昆虫模式标本室 (CSCS)。

关键词 膜翅目, 叶蜂科, 叶蜂属, 新种, 中国。

中图分类号 Q969.542.6

叶蜂属 *Tenthredo* L. 是叶蜂科 Tenthredinidae 叶蜂亚科 Tenthredininae 的第 1 大属, 据统计世界上有效种名已超过 1 000 种。叶蜂属是全北界分布的属, 东亚是其主要分布区域, 在该区域已经记载大约 600 种。截至 2010 年底, 中国已经报道叶蜂属种类 294 种 (Wei, 2006; Wei *et al.*, 2006; Wei & Nie, 2006; Niu & Wei, 2008; Yan *et al.*, 2008; Wei & Niu, 2009; Haris, 2009; Zhao *et al.*, 2010)。本文记述中国叶蜂属 2 新种, 三斑槌腹叶蜂 *Tenthredo trixanthomacula* Wei *et* Yan, sp. nov. 和褐跗短角叶蜂 *Tenthredo rubitarsalitia* Wei *et* Xu, sp. nov.。前者隶属于槌腹种团 *T. formosana* group, 后者隶属于短角种团 *T. potanini* group。新种模式标本保存于中南林业科技大学昆虫系统与进化生物学实验室昆虫模式标本室 (CSCS)。

1 三斑槌腹叶蜂, 新种 *Tenthredo trixanthomacula* Wei *et* Yan, sp. nov. (图 1~12)

♀ 体长 15 mm (图 1)。头胸部浅黄褐色, 侧窝底部、单眼中沟和后沟、单眼环黑色, 上颚背缘条斑、盾沟窝底部、小盾片前凹底部、后胸后背板后缘黑褐色; 中窝、上眶、单眼后区中部、中胸背板前叶和侧叶纵斑橘褐色; 触角柄节和第 6 节端部以远黄褐色, 其余部分暗褐色; 腹部暗褐色, 第 1 节背板全部、第 4~9 节背板两侧大斑以及第 8~10 节背板中部大型横斑、各节腹板、锯鞘端大部亮黄褐色, 腹部第 2 节和第 4 节背板前缘细横斑黑色。足浅黄褐色, 中后足胫跗节、前足跗节暗褐色, 后足基节端部背侧条斑、后足股节内外侧长条斑、前足胫节侧条斑、中后足胫节前侧和后侧条斑、后足胫节距端部黑色。体毛黄褐色。翅浅烟黄色透明, 前缘脉和翅痣黄褐色, 其余翅脉大部黑褐色。

体大部光滑, 光泽强烈, 头胸部无明显刻点, 刻

纹微弱; 中胸背板刻点十分细小浅平, 刻纹细弱模糊, 光泽较强烈; 腹部第 1 背板光滑, 无明显刻点, 刻纹微弱, 其余各节背板无明显刻点, 具细弱且密集的刻纹。

体形匀称, 头胸部等宽。唇基平坦 (图 4), 明显宽于复眼下缘间距, 前缘缺口半圆形, 深达唇基 1/2 长, 侧叶端部圆钝; 上唇宽圆; 颞眼距等于单眼半径; 后颊脊伸达单眼后区两侧; 后头背面观 (图 3) 等于复眼 1/2 长, 两侧弧形弯曲, 亚平行; 额区平坦; 触角窝上突不隆起, 中窝浅平宽大, 侧窝沟状; 额脊低钝; 内眶稍倾斜; 单眼后沟细浅, 中沟细深; 单眼后区向后倾斜, 宽长比等于 1.6, 后缘无脊; 侧沟细浅, 微弯曲, 向后亚平行。触角细 (图 11), 等长于头胸部之和, 第 2 节长显著大于宽, 第 3 节 1.4 倍于第 4 节长, 鞭节亚端部不膨大短缩, 第 8 节长宽比约等于 2.7。中胸背板前叶后部尖, 中纵沟微弱; 小盾片 (图 5) 强烈隆起, 顶部圆钝, 后坡中部不凹入, 无纵脊和顶点; 附片无纵脊; 中胸前侧片 (图 8) 中部明显隆起, 具倾斜的模糊钝脊; 中胸腹板无刺突。后足胫节内距 1.8 倍于胫节端部宽, 稍长于基跗节 1/2, 基跗节稍长于其后 3 节之和, 第 4 节背缘长于端缘; 跗垫小型; 爪具短钝基片, 内齿明显短于外齿。前翅 cu-a 脉位于 1M 室下缘内侧 1/3; 2Rs 室明显长于 1Rs 室, 外下角几乎不倾斜, 2r 脉交于 2Rs 室上缘外侧 3/7。后翅臀室具柄式, 柄部稍短于 cu-a 脉 1/2。腹部第 1 节强烈隆起, 后缘缺口宽深, 第 2 节明显窄于第 1 节, 5~7 节明显膨大。锯鞘等长于前足胫节, 鞘端明显长于鞘基, 侧面观 (图 6); 背面观锯鞘端狭长, 鞘毛较短, 稍弯曲。雌虫锯腹片 (图 12) 21 锯齿, 锯齿外侧明显延长, 基部不切入, 中部锯齿明显突出 (图 7), 向内倾斜, 无外侧亚基齿, 具 1 个内侧亚基齿; 节缝具较宽刺毛带。

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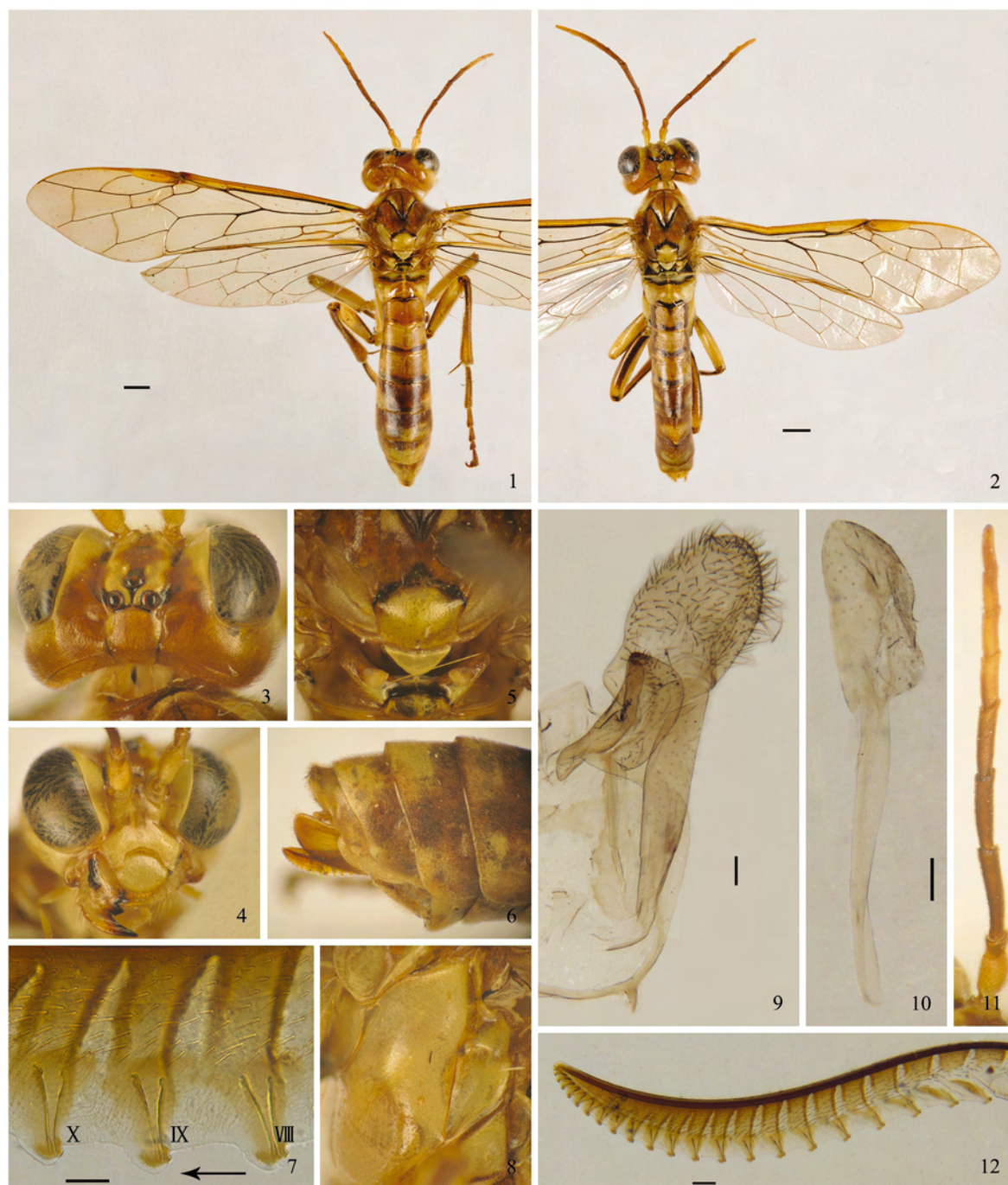


图1~12 三斑槌腹叶蜂, 新种 *Tenthredo trixanthomacula* Wei et Yan, sp. nov.

1~2. 成虫 (adult in dorsal view) 3. 头部背面观 (head in dorsal view) 4. 头部前面观 (head in frontal view) 5. 中胸小盾片 (mesoscutellum) 6. 锯鞘侧面观 (sheath in lateral view) 7. 第8~10锯刃 (the 8th - 10th serrulae) 8. 中胸侧板 (mesopleuron) 9. 生殖铗 (gonoforceps) 10. 阳茎瓣 (penis valve) 11. 触角 (antenna) 12. 锯腹片 (lancet) 1, 3~8, 11~12. 雌 (female) 2, 9~10. 雄 (male) 比例尺 (scale bars): 1~2 = 1 mm; 7 = 50 μ m; 9~10 = 100 μ m; 12 = 200 μ m

♂ 体长 13.5 mm (图2); 体色和构造十分类似雌虫; 下生殖板中部稍鼓突, 端缘圆钝; 阳茎瓣 (图10); 生殖铗 (图9)。

正模 ♀, 贵州雷公山方祥, 海拔 1 000 m, 2005-06-02, 梁旻雯采。副模: 1 ♀, 安徽金寨天堂寨

(31°09'N, 115°45'E; 海拔 596 m), 2006-05-06, 朱小妮采; 1 ♂, 陕西终南山 (33°59'N, 108°58'E; 海拔 1 555 m), 2006-05-27, 杨青采; 1 ♀, 安徽金寨天堂寨, 海拔 1 000 m, 2006-06-02, 周虎采; 1 ♀, 安徽金寨天堂寨, 海拔 1 220 m, 2006-06-02, 牛耕耘采;

1 ♀, 四川雅安碧峰峡, 海拔 1 000 ~ 1 100 m, 2003-07-09, 刘卫星采; 1 ♀, 四川青城后山飞泉沟 (30°55'N, 103°29'E; 海拔 900 m), 2006-06-28, 钟义海采; 2 ♀ ♀, 四川青城后山白云寺, 海拔 1 600 m, 2006-06-29, 周虎、钟义海采; 1 ♀, 湖南武冈云山, 海拔 1 100 m, 2003-06-04, 贺应科采; 1 ♀, 湖南涟源龙山, 1999-05-09, 张开建采; 1 ♀, 江西萍乡万龙山, 海拔 1 000 ~ 1 200 m, 2006-05-02, 魏美才采; 1 ♀, 陕西凤县红花铺镇 (33°44'N, 107°10'E; 海拔 1 080 m), 2007-05-25, 朱巽采; 1 ♀, 湖南省林业科学院标本; 1 ♀, 陕西潼关桐峪镇 (34°27'N, 116°21'E; 海拔 1 052 m), 2006-05-30, 朱巽采; 1 ♀, 湖南幕阜山山沟里 (28°57'N, 113°49'E; 海拔 860 m), 2008-05-21, 刘飞采; 2 ♀ ♀, 甘肃太阳山, 2008-06-13, 武星煜、杜维明采; 1 ♀, 甘肃省徽县麻沿林场, 2007-06-05, 武星煜采; 1 ♀, 甘肃省麦积东岔林场, 2007-06-13, 武星煜采; 1 ♀, 甘肃省秦州皂郊太阳山, 2006-06-15, 李逢春采; 1 ♀, 甘肃省秦州皂郊太阳山, 2007-06-06, 李逢春采; 2 ♀ ♀, 甘肃省小陇山东岔林场桃花沟 (34°18'N, 106°34'E; 海拔 1 180 m), 2009-06-11, 武星煜、辛恒采; 1 ♀, 1 ♂, 甘肃林院实验林场 (34°20'N, 106°E; 海拔 1 590 m), 2009-07-09, 范慧、杨亚丽采; 1 ♀, 甘肃省小陇山麦积林场太阳山 (31°25'N, 105°46'E; 海拔 1 620 m), 2009-07-28, 杜维明采; 1 ♀, 甘肃林院实验林场, 海拔 1 590 m, 2009-07-27, 武星煜采; 1 ♀, 甘肃省天水麦积街子林场漩家沟 (34°27'N, 106°04'E; 海拔 1 370 m), 2009-06-15, 张秀玲采; 1 ♀, 湖北神农架小寨 (31°34'N, 110°08'E; 海拔 905 m), 2008-05-24, 赵赴采; 1 ♀, 湖北神农架老君山 (31°25'N, 110°32'E; 海拔 841 m), 2008-05-16, 赵赴采; 1 ♀, 湖北神农架千家坪, 海拔 1 789 m, 2009-07-03, 赵赴采; 1 ♀, 湖北神农架千家坪 (31°24'N, 110°24'E; 海拔 1 789 m), 2009-07-04, 焦翌采; 2 ♀ ♀, 湖北神农架漳宝河 (31°26'N, 110°24'E; 海拔 1 156 m), 2009-06-12 ~ 13, 赵赴采; 1 ♂, 湖北神农架小寨 (31°34'N, 110°08'E; 海拔 905 m), 2008-05-24, 焦翌采; 10 ♀ ♀, 2 ♂ ♂, 山西五老峰灵峰观 (34°48'N, 110°35'E; 海拔 1 300 m), 2008-07-06, 费汉榄、王晓华采; 2 ♀ ♀, 山西五老峰红沙峪, 海拔 1 300 m, 2008-07-04, 费汉榄、王晓华采; 12 ♀ ♀, 6 ♂ ♂, 山西五老峰漆树台, 海拔 1 200 m, 2008-07-05, 费汉榄、王晓华采; 2 ♀ ♀, 2 ♂ ♂, 山西五老峰锦绣谷, 海拔 1 077 m, 2008-07-05, 费汉榄、王晓华采; 1 ♀, 山西五老峰锦绣谷, 海拔 1 029 m, 2009-06-08, 王晓华采; 1 ♀, 山西五老峰明眼洞, 海拔 1 603 m, 2008-

07-03, 费汉榄采; 1 ♂, 山西五老峰月坪梁, 海拔 1 739 m, 2008-07-03, 费汉榄采; 1 ♀, 山西绵山水涛沟 (36°51'N, 112°E, 海拔 1 439 m), 2008-06-30, 费汉榄采; 1 ♀, 甘肃林校实验林场 (34°20'N, 106°E, 海拔 1 600 m), 2009-07-09, 朱巽采。

分布: 中国 (甘肃、山西、陕西、安徽、江西、湖南、湖北、四川、贵州)。

词源: 新种种名源自腹部第 6 ~ 8 背板各具 3 个黄斑。

鉴别特征 本种与 *T. longiserrula* Wei, 2002 最近似, 体色和刻点几乎完全相同, 但本种锯刃显著突出, 无外侧亚基齿, 具 1 个内侧亚基齿, 锯刃外侧明显延长, 基部不切入 (后者锯刃低平, 无内侧亚基齿, 中部锯刃外侧亚基齿 25 ~ 26 枚, 锯刃外侧明显切入)。

2 褐跗短角叶蜂, 新种 *Tenthredo rubitarsalitia* Wei *et* Xu, *sp. nov.* (图 13 ~ 24)

♀ 体长 11 ~ 12 mm (图 13)。体黑色, 腹部背板具明显紫色光泽; 上唇、唇基、上颚基半部、腹部第 3 背板大部、第 4 背板两侧亮黄色, 口须大部、后眶窄长条斑、触角梗节和柄节、翅肩片大部、前胸背板后缘狭边、腹部第 5 节背板后缘狭边、第 6 ~ 8 背板后缘宽斑、各节腹板后缘宽边、第 10 背板全部黄褐色, 锯鞘端浅褐色, 触角 3、4 节背侧部分褐色; 足黑色, 前中足股节前侧、胫节前侧大部、各足第 2 转节黄褐色, 后足胫节大部、各足跗节橘褐色。翅浅烟褐色透明, 端部烟色稍暗, C 脉及翅痣橘褐色, 其余翅脉大部黑褐色。体毛灰褐色。

唇基光滑, 光泽强; 头部背侧具粗糙皱纹和模糊刻点, 光泽弱; 后眶具细密小刻点; 胸部背板刻点和刻纹粗密, 光泽暗淡, 附片光泽稍强, 刻点粗大; 后小盾片大部光滑; 胸部侧板具致密皱刻纹, 无光泽; 腹部各节背板均具细密横向刻纹, 第 1 背板光泽稍强, 其余背板光泽弱。

体粗短。头部前面观 (图 16), 唇基缺口浅小, 端部宽约为唇基端部长的 1/2, 深约为唇基 1/3 长, 侧叶宽短, 端部圆钝; 上唇宽大, 端部圆钝; 颞眼距 1.2 倍于侧单眼直径; 复眼内缘向下显著收敛, 间距 0.85 倍于眼长径; 内眶上半部平坦, 下半部倾斜; 触角窝上突缺; 中窝浅平, 侧窝深沟状; 额区近方形, 稍呈平台状隆起, 无额脊; 单眼中沟和后沟细深, 单眼后区宽 2 倍于长, 侧沟细浅, 明显弯曲, 向后稍分歧; 背面观 (图 15) 后头两侧弧形收缩, 约等于复眼 1/2 长; 后颊脊上部较弱, 但伸抵单眼后区后缘。触角 (图 19) 粗短, 长约 0.9 倍于头胸部之和, 第 2



图 13~24 褐跗短角叶蜂, 新种 *Tenthredo rubitarsalitia* Wei et Xu, sp. nov.

13~14. 成虫 (adult in dorsal view) 15. 头部背面观 (head in dorsal view) 16. 头部前面观 (head in frontal view) 17. 中胸小盾片 (mesoscutellum) 18. 中胸侧板 (mesopleuron) 19. 触角 (antenna) 20. 锯鞘侧面观 (sheath in lateral view) 21. 第 8~10 锯刃 (the 8th - 10th serrulae) 22. 生殖铗 (gonoforceps) 23. 阴茎瓣 (penis valve) 24. 锯腹片 (lancet) 13, 15~21, 24. 雌 (female) 14, 22~23. 雄 (male) 比例尺 (scale bars): 13~14 = 1 mm; 21, 23 = 50 μ m; 22 = 100 μ m; 24 = 200 μ m

节长 1.1 倍于宽, 第 3 节 1.5 倍于第 4 节长, 鞭节中部外侧明显膨大, 第 8 节长宽比等于 1.3。中胸背板前叶无中纵沟, 小盾片 (图 17) 锥状隆起, 具弱中纵脊和顶点, 附片具明显中纵脊; 中胸前侧片 (图 18) 中部钝角状隆起, 顶部无明显凹窝, 腹侧无腹刺突; 后胸后侧片后角圆钝, 不延长。后足胫节内端距 1.5 倍于后足胫节端部宽, 等于基跗节 1/2 长; 跗节细, 基跗节长 0.9 倍于其后 3 跗分节之和; 跗垫窄条形, 长 0.7 倍于基跗节端部宽, 第 1、2 跗垫间距 2 倍于第 2 跗垫长; 爪无基片, 内齿明显短于外齿。前翅 R+M 脉等长于 1M 脉, 2Rs 稍短于 1R1+1Rs 室之和, 2r 脉交于 2Rs 室上缘外侧 1/3, cu-a 脉位于 M 室下缘内侧 1/3; 后翅 M 室长稍大于高, 微长于 Rs 室的 1/2, 臀室无柄式。锯鞘等长于前足胫节, 锯鞘端 1.6 倍于锯鞘基长, 侧面观 (图 20) 端部圆钝, 背面观鞘毛稍弯曲。锯腹片 (图 24) 21 刃, 节缝刺毛带狭窄, 明显弯曲; 锯刃稍倾斜突出, 中部锯刃具 2 个内侧亚基齿和 6~7 个外侧亚基齿 (图 21)。

♂ 体长 7.5 mm (图 14); 体色与构造类似与雌虫, 但腹部第 3 及 8 节背板全部、下生殖板端部黄白色, 第 7 节背板后缘黄褐色; 触角等长于头胸部之和, 鞭节中端部不膨大; 单眼后区宽长比等于 2.2, 中胸小盾片中纵脊显著; 下生殖板宽 1.5 倍于长, 端部截形; 阳茎瓣 (图 23); 生殖铗 (图 22), 抱器短宽, 亚端部明显宽于基部。

正模 ♀, 安徽金寨天堂寨 (31° 09' N, 115° 45' E; 海拔 596 m), 2006-05-06, 朱小妮采。副模: 1 ♀, 湖南平江幕阜山, 海拔 1 200 m, 2001-05-07, 魏美才采; 1 ♀, 湖南平江幕阜山, 海拔 1 400 m, 2001-05-08, 钟义海采; 1 ♀, 陕西终南山 (33° 54' N, 108° 58' E; 海拔 1 292 m), 2006-05-28, 杨青采; 1 ♀, 安徽岳西县鹞落坪 (31° 2' N, 116° 5' E; 900 m), 2007-04-27, 聂梅采; 1 ♀, 陕西留坝大坝沟 (33° 40' N, 106° 49' E; 海拔 1 320 m), 2007-05-20, 朱巽采; 2 ♀ ♀, 湖南幕阜山天门山寺 (28° 58' N, 113° 49' E; 海拔 1 350 m), 2008-04-25, 张媛采; 2 ♀ ♀, 湖南幕阜山云腾山庄, 海拔 1 100 m, 2008-04-25, 张媛、李泽建采; 1 ♀, 湖南幕阜山山沟里, 海拔 860 m, 2008-04-24, 李泽建采; 1 ♀, 湖南幕阜山老朋沟, 海拔 1 220 m, 2008-04-25, 李泽建采; 1 ♀, 1 ♂, 甘肃小陇山麻沿林场 (34° 03' N, 105° 45' E; 海拔 1 420 m), 2008-04-25, 武星煜、辛恒采; 1 ♀, 湖南大围山春秋坳 (28° 25' N, 114° 06' E; 海拔

1 300 m), 2010-04-03, 朱朝阳采; 1 ♀, 西天目山仙人顶, 1990-06-02~04, 汪信庚采 (存浙江大学农学院昆虫标本馆); 1 ♀, 西天目山, 1988-05-17, 楼晓云采 (存浙江大学农学院昆虫标本馆)。

分布: 中国 (甘肃、安徽、浙江、湖南)。

词源: 新种种名源自跗节橘褐色。

鉴别特征 本种与三黄短角叶蜂 *Tenthredo sanhuangica* Nie et Wei, 2002 近似, 但单眼后区宽长比等于 2; 触角梗节和柄节黄褐色, 鞭节粗短, 亚端部明显膨大; 翅基片黄褐色, 小盾片黑色, 具中纵脊; 中胸前侧片腹侧无腹刺突; 腹部第 6~7 节背板后缘、各节腹板后缘具黄斑, 锯腹片锯齿较突出等, 与后者不同 (后者单眼后区宽长比小于 2; 触角基部两节黑色, 鞭节细, 亚端部不膨大; 翅基片黑色, 小盾片黄色, 无中纵脊; 中胸前侧片腹侧具腹刺突; 腹部第 6~7 节背板后缘、第 2、4~6 节腹板后缘无明显黄斑, 锯腹片锯齿较低弱)。

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